

MOLLUSCA OF ZION NATIONAL PARK, UTAH

BY WENDELL O. GREGG

A three-months stay in Zion National Park during 1935 gave opportunity for a rather thorough search for the members of its molluscan fauna. I arrived there early in May when conditions are most favorable for finding the minute species of land snails. In my list I have combined the results of this study with what published records I have been able to find. In 1929 Mr. A. M. Woodbury¹ reported fifteen species of mollusca from this park. *Microphysula ingersolli*² is reported to have been taken by Dr. Pilsbry. Chamberlin and Berry³ report *Gastrocopta ashmuni*. In addition to these forms the five previously unreported species which I took there bring the total number of species to twenty-two. Two of the species I found, *Vallonia perspectiva* and *Hawaiiia minuscula neomexicana*, have not been reported from Utah. Three other species not previously taken in the park are *Pisidium abditum*, *Vallonia pulchella* and *Lymnaca bulimoides cassi*.

There are some changes in the names previously used. The large snail formerly reported from this locality as *Oreohelix cooperi* proves to be *O. strigosa depressa*.⁴ This fact is borne out by the anatomy as well as by the shell characters. The shell previously reported from here as *Pupilla syngenes dextroversa* proves to be *Pupilla blandi*. *Oreohelix haydeni oquirrhensis*⁵ is reported as occurring at the Narrows in Zion Canyon. It is the consensus of opinion that this record is also erroneous.

In the following list I have enumerated the principal locations in the park where I have taken specimens.

Pisidium abditum Haldman. Quite plentiful in a small pond in Birch Creek Canyon.

Vallonia pulchella Müller. Under dead leaves near Grotto Camp Ground; three specimens found. Probably introduced.

¹ NAUTILUS, 43: 54.

² Bull. of the University of Utah, vol. 19, no. 4, p. 75.

³ *Ibid.*, vol. 21, no. 2, p. 4.

⁴ Land Mollusca of N. A., vol. 1, part 1, p. 431.

⁵ NAUTILUS, 34: 141.

Vallonia gracilicostata Reinhardt. Along Virgin River, foot of Bridge Mt.; Grotto Camp Ground; Saddle Nook, and other localities. Quite common.

Vallonia perspectiva Sterki. Grotto Camp Ground and Saddle Nook. Previously overlooked because of its diminutive size.

Orcohelix strigosa depressa Cockerell. The Grotto, Grotto Camp Ground, the Narrows, Weeping Rock, Saddle Nook, Fairy Land, Birch Creek Canyon, Temple of Sinawava and Wiley's Retreat. Commonly found throughout canyon under dead leaves, old logs and in rock slides. One sinistral specimen was taken at Saddle Nook.

Microphysula ingersolli Bland. Specimens were taken in 1927 by Dr. Pilsbry. Others have failed to find it. It is found commonly in southern Utah at higher altitudes.

Gastrocopta ashmuni Sterki. Reported taken by R. V. Chamberlin and Elmer Berry, Sept. 24, 1930.

Pupoides marginatus Say. Mr. Woodbury reports taking two specimens.

Pupilla blandi Morse. Near Virgin River at foot of Bridge Mountain, Grotto Camp Ground and Temple of Sinawava.

Pupilla syngenes Pilsbry. Found at the Grotto, Grotto Camp Ground, Saddle Nook and along the trail to the Narrows.

Cochlicopa lubrica Müller. Taken at the Grotto, Grotto Camp Ground, Oak Creek Canyon, Saddle Nook, Refrigerator Canyon, Temple of Sinawava and Wiley's Retreat. Very common.

Vitrina alaskana Dall. Along Virgin River at foot of Bridge Mountain, Grotto Camp Ground, the Grotto, Weeping Rock, along trail to the Narrows, Saddle Nook, Refrigerator Canyon, Emerald Pool Canyon, Temple of Sinawava and Wiley's Retreat.

Retinella indentata Say. Grotto Camp Ground, Weeping Rock, Saddle Nook, Refrigerator Canyon, Emerald Pool Canyon and Wiley's Retreat.

Euconulus fulvus alaskensis Pilsbry. Refrigerator Canyon, Emerald Pool Canyon, Temple of Sinawava and Birch Creek Canyon.

Zonitoides arborea Say. The Grotto, Grotto Camp Ground, Weeping Rock, Oak Creek Canyon, Saddle Nook, Refrigerator Canyon, Emerald Pool Canyon, Temple of Sinawava, along trail to the Narrows and Wiley's Retreat.

Hawaiiia minuscula neomexicana Cockerell and Pilsbry. Two specimens were found by a spring near the entrance to Refrigerator Canyon and one was found at Saddle Nook.

Agriolimax campestris Binney. Along Virgin River at foot of Bridge Mt., the Grotto, Oak Creek Canyon, Grotto Camp Ground, Saddle Nook, Birch Creek Canyon, Refrigerator Canyon and Emerald Pool Canyon.

Discus cronkhitei cronkhitei Newcomb. Grotto Camp Ground, Weeping Rock, Saddle Nook and Wiley's Retreat.

Succinea avara Say. Grotto Camp Ground, Saddle Nook, Emerald Pool Canyon and Birch Creek Canyon.

Lymnaea (Stagnicola) bulimoides cassi Baker. Small stream, Saddle Nook.

Gyraulus similaris Baker. Pool in Birch Creek Canyon.

Physa (Petrophysa) zionis Pilsbry. On wet faces of cliffs along the trail to the Narrows. I noted colonies at points approximately 1053, 1058, 1114 and 1544 yards from the Temple of Sinawava. A colony was also located at "Fairy Land" about three-fourths mile south of the Temple of Sinawava. Here many specimens were noted on horizontal surfaces of large flat rocks at the base of the cliff as well as on the perpendicular surface of the cliff. *Physa zionis* is reported from the canyon beyond the end of the trail along the first mile of the Narrows proper.

NOTES AND NEWS

EXACT DATES OF THE NAUTILUS.—Vol. 53 (1): pp. 1-36, pls. 1-7, was mailed July 21, 1939; (2): 37-72, pls. 8-9, Oct. 20, 1939; (3): 73-108, pls. 10-12, Jan. 28, 1940; (4): 109-144 (+ viii), pls. 13-14, Apr. 29, 1940.—H.B.B.

CHONDROPOMA DENTATUM.—I would like to report the occurrence here in Naples, Collier County, Florida, of *Chondropoma dentatum*. The single specimen taken is dead and bleached and its establishment here in the living state is not determined, but the occurrence of even a dead specimen so far north of its usual habitat in the keys I think to be not without interest. It came from under a hedge on the rear side of the Naples Inn lawn, with *Polygyra uvulifera*.—J. L. BAILY.

PECULIAR OLIVA.—An interesting anomaly has been noted in a series of the shells of *Oliva sayana* Ravenel collected about Sanibel-Captiva, Florida. Each individual specimen in this small group is entirely normal in form, color-pattern and high polish, but bears a well-elevated, rounded, cord-like ridge about 2 mm. wide, parallel with the suture and generally at or near the middle of the body whorl. This cord-like girdle shares the polished enamel of the entire shell surface, and, as shown in several juvenile specimens, seems to be a structural anomaly of the shell